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Malignant syphilis and hepatitis
Case report

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The *Treponema pallidum* is capable of involving almost all the structures of the body, some commonly and others rarely. The skin is often affected, but the thick crusted ulcerative lesions of malignant syphilis (syphilis maligna praecox) are rare (Lejman and Starzycki, 1972). Hepatitis due to early syphilis has seldom been reported in recent years (Baker, Kaplan, Wolfe, and McGowan, 1971; Lee, Thornton, and Conn, 1971; Parker, 1972). The subject has been reviewed in the past by Hahn (1943) and Rajam and Rangiah (1954). These observations of the rarity of the condition prompted us to report this case of malignant syphilis and hepatitis.

Case report

A 24-year-old unmarried male labourer was admitted to the dermatological ward on May 23, 1973, with a rash and jaundice of 4 weeks' duration. He had had frequent sexual exposures with different women. The most recent was 4 months ago, and 1 month later he had developed a genital sore which healed within a week after two injections of penicillin and some herbal medicines. Fresh genital lesions appeared after a fortnight followed by skin lesions, jaundice, intermittent fever, joint pains, anorexia, and nausea. The skin lesions had first appeared on the face and then spread to other parts of the body. They had enlarged slowly and formed ulcers in places. The patient was not an alcoholic. He had not taken any other drug in the recent past nor had he received any blood transfusion.

Examination

The patient was of moderate build, intelligent, and co-operative. He had marked jaundice. The mucous membranes of the mouth were normal. The pulse rate was 100 per minute with a blood pressure of 120/80 mm. The axillary temperature was 100°F. There was generalized lymphadenopathy characterized by discrete, non-tender, firm, mobile glands.

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Systemic examination showed an enlarged, firm, tender liver 3 cm. below the costal margin. No other abnormality could be found.

Papulo-nodular lesions of the skin, varying in size from 0·5 to 3 cm., were distributed on the extremities, face, and trunk. At places the nodules were necrotic, forming large thick crusts (Figure), some of which had fallen off leaving large discharging ulcers. All the lesions were painless. The prepuce was oedematous and only partially retractable. There were multiple, slightly tender, indurated, well-defined, oozing ulcers on the under surface of the prepuce and glans.

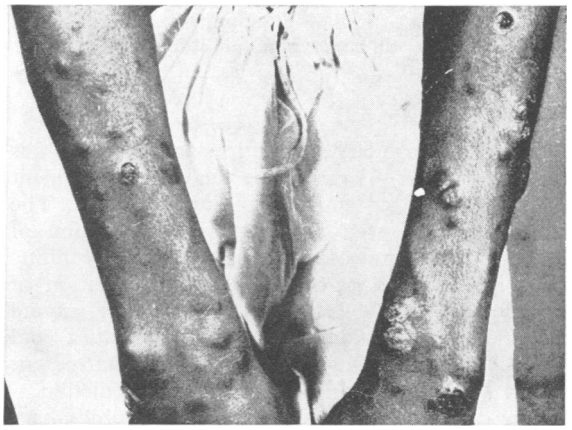

FIGURE *Papulo-nodular, crusted, and ulcerative skin lesions on the arms*

Laboratory investigations

The haemoglobin was 13·0 g. per cent. and the total leucocyte count 6,800 per cu. mm. The differential count showed 68 per cent. polymorphs, 14 per cent. lymphocytes, 16 per cent. eosinophils, and 2 per cent. monocytes. The erythrocyte sedimentation rate was 36 mm. in the 1st hour (Wintrobe). The urine contained bile salts and bile pigments, but no urobilinogen could be detected. The direct Van den Bergh reaction gave an immediate positive result. The serum bilirubin was 12 mg. per cent. The total protein was 6·6 g. per cent.; albumin 3 g. and globulin 3·3 g. per cent. The SGOT was 52 and the

SGPT 96 i.u. The alkaline phosphate was 14 KA units with the zinc and thymol turbidity each 10 units. The prothrombin time was 58 sec.

A VDRL test was reactive in a dilution of 1:64.

Dark-ground examination of the exudate from the ulcerative lesions revealed typical *Treponema pallidum*.

A liver biopsy was contraindicated because of the high prothrombin time. The histopathology of skin from an early lesion showed changes suggestive of secondary syphilis.

Treatment and progress

The patient was given procaine penicillin 600,000 i.u. daily for 25 days. 12 hours after the first injection he developed a fever of 100°F. which lasted for 6 hours, suggesting a Jarisch-Herxheimer reaction. Within a short time of starting the treatment he had relief from the joint pains. The anorexia, nausea, and jaundice diminished considerably in the course of a week, and most of the papulo-nodular skin lesions healed. The crusted and ulcerated lesions took 3 to 4 weeks to heal. The size of the liver gradually diminished and was not palpable after a month.

Repeated liver function tests during the follow-up period showed a gradual reversal towards normal, and 2 months after completing treatment the serum bilirubin was 1·3 per cent., the SGPT 26, and the SGOT 18 i.u. The VDRL was still reactive in a dilution of 1:16.

Discussion

The severe secondary syphilitic skin rash—syphilis maligna praecox—is rare, as is the clinically evident involvement of systemic organs at this stage. The present case showed a very rare combination of syphilis maligna praecox and hepatitis. The syphilitic aetiology was confirmed by the demonstration of treponemes in the skin lesions by dark-ground examination, the strongly reactive VDRL test, and the rapid improvement in symptoms and signs within 7 days of starting treatment with penicillin.

Few cases of hepatitis due to early syphilis have been reported in recent years (Baker and others, 1971; Lee and others, 1971; Parker, 1972). It is likely that syphilis is not always considered in the differential diagnosis of hepatitis by those physicians who usually manage these cases, and it is suggested that in all unusual cases of jaundice due to hepatitis investigations for syphilis should be done. A dramatic response to penicillin is to be expected in those cases due to syphilis.

Summary

A rare case of syphilis maligna praecox, hepatitis, and jaundice is described. The possibility of syphilis should always be considered in unusual cases of hepatitis and jaundice, as it is likely that this diagnosis is sometimes overlooked.

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Syphilis maligne et hépatite

SOMMAIRE

On rapporte un cas rare de syphilis maligne précoce avec hépatite et jaunisse. L'hypothèse de syphilis doit toujours être prise en considération dans les cas inexpliqués d'hépatite avec ictère et il est probable que le diagnostic est quelquefois méconnu.